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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,625	11/07/2001	Yeshik Shin	594728118US	1053
25096	7590	10/18/2005	EXAMINER	
PERKINS COIE LLP			YANG, LINA	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			PAPER NUMBER	
SEATTLE, WA 98111-1247			2665	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/045,625

Applicant(s)

SHIN ET AL.

Examiner

Lina Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 May 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Sonnier et al (U. S. Patent No. 5,574,849) in view of Higurashi et al (U. S. Patent No. 5,963,703).

Regarding claims 1 and 16, Sonnier teaches a method for transmitting packet types of packets, the method comprising: receiving a packet having symbols (data or command and commands can be read or write; figs. 1A and 6; col. 11 lines 22-35, col. 17 lines 10-47 and col. 22 lines 32-34); identifying a packet type of the packet (fig. 6 col. 22 lines 32-34); transmitting a synchronization symbol (col. 22 lines 22-26; col. 26 lines 18-35; col. 27 lines 30-38 and 56-67 and col. 28 lines 1-2 and col. 28 lines 31-35), wherein the transmitted synchronization symbol provides synchronization information (col. 26 lines 18-35 and col. 28 lines 31-35); and transmitting the symbols of the received packet (data symbols transmitted out of X and Y encoders; col. 27 lines 30-38 and 56-67 and col. 28 lines 1-2).

Sonnier differs from the claimed invention in that Sonnier does not specifically teach that the synchronization symbol corresponds to the identified packet type and each packet type has a different synchronization symbol. However, Higurashi teaches that a control signal of read or write can be generated in response to the packet type information (col. 4 lines 37-40). And Sonnier suggested that synchronization symbols and/or control symbols could be transmitted before transmitting the message packet (col. 28 lines 31-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include, transmitting a synchronization symbol that corresponds to the identified packet type, wherein the transmitted synchronization symbol provides synchronization information and wherein each packet type has a different synchronization symbol; as taught by Higurashi in the assembly of Sonnier in order to transmit the control command before transmit the message packet.

Regarding claim 9, Sonnier teaches a method for identifying packet types of packets of symbols, the method comprising: receiving a packet of symbols (col. 22 lines 31-34).

Sonnier differs from the claimed invention in that Sonnier does not specifically teach that receiving a synchronization symbol indicating a packet type, each packet type having a different synchronization symbol; and indicating that the received packet of symbols has the packet type of the received synchronization symbol. However,

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Higurashi teaches that a control signal of read or write can be generated in response to the packet type information (col. 4 lines 37-40). And Sonnier suggested that synchronization symbols and/or control symbols could be transmitted before transmitting the message packet (col. 28 lines 31-35). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to make the synchronization symbol (including the control command) to include a packet type (such as read or write), each packet type having a different synchronization symbol (such as read or write); and indicating that the received packet of symbols has the packet type of the received synchronization symbol; as taught by Higurashi in the assembly of Sonnier in order to receive the control command before transmit the message packet.

Regarding claims 2, 10, and 17, Sonnier further teaches that the symbols of the packet include in-band symbols and the synchronization symbols are out-of-band symbols (col. 27 lines 30-38).

Regarding claims 3, 11 and 18, Sonnier further teaches that the in-band symbols are transition optimized and the out-of-band synchronization symbols are not transition optimized (col. 17 lines 44-47 and col. 27 lines 30-38).

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Regarding claims 4, 12 and 19, Sonnier further teaches that the synchronization symbol is transmitted before transmitting the symbols of the packet (col. 28 lines 31-35).

Regarding claims 5 and 20, Sonnier further teaches that the packet has a header with a field that indicates packet type and the identifying of the packet type includes checking the field of the header that indicates packet type (figs. 3A and col. 17 lines 10-47).

Regarding claims 6, 13 and 21, Sonnier further teaches that the packet types include a data packet (col. 11 lines 27-29 and col. 17 lines 10-47).

Regarding claims 7, 14 and 22, Sonnier further teaches that the packet types include a control packet (col. 11 lines 27-29 and col. 17 lines 10-47).

Regarding claims 8, 15 and 23, Sonnier further teaches that the symbols are transmitted to a switch network (col. 1 lines 13-34 and col.; fig. 19A and col.53 lines 25-55).

2. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over by Sonnier et al (U. S. Patent No. 5,574,849) in view of Higurashi et al (U. S. Patent No. 5,963,703), and further teaches that in view of Howe (U. S. Patent application No. 20030189922).

Regarding claim 24, the combined assembly of Sonnier and Higurashi differs from the claimed invention in that the combined assembly does not specifically teach that the communications device is part of a storage area network. However, Howe teaches a communications device (Fig. 9, an integrated layer one switch having similar functions as disclosed in claim 1) is part of a storage area network ([0076]- [0077 and [0087])). Therefore, it would have been obvious to have the combined assembly of Sonnier and Higurashi configured as part of a storage area network, as taught by Howe, in order to provide a variety of applications for the packet-based communications network.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wilson et al. (US Patent No. 6,738,821 B1) teaches a network for efficiently communicating storage data through an Ethernet storage protocol (ESP) that streamlines the processing and communication of storage data and removes the overhead associated with prior art communication protocol techniques.


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4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached Monday through Thursday between 8:00 a.m. and 7:00 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



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